

## CLAIMS

What is claimed is:

1. A method for managing a data burst comprising the steps of:  
determining one or more input parameters;  
selecting a data rate for the data burst as a function of the input parameter;  
and  
5 selecting a duration for the data burst as a function of the selected data rate.
2. The method of claim 1 wherein the step of selecting a duration is further made as a function of an end-of-burst data residue parameter.
3. The method of claim 1 wherein the step of selecting a duration further comprises:  
evaluating a plurality of burst durations and selecting the duration that, when applied with the selected data rate, provides a minimum end-of-burst data residue.
4. The method of claim 1 wherein the one or more input data parameters include an input data rate and an amount of data available in an input data buffer at the beginning of the data burst.
5. The method of claim 4 wherein the measure of the input data rate is determined as a function of an amount of data offered for transmission over a defined observation interval.

6. The method of claim 4 wherein the step of selecting a data rate includes the step of:

determining a minimum required data rate as a sum of the input data rate and a rate needed to transmit data to the input buffer at the beginning of the data burst  
5 over a maximum available burst duration.

7. The method of claim 6 wherein the selected data rate is determined as the lowest supported operating channel rate that is equal to or greater than the determined minimum required data rate.

8. A method for managing a data burst comprising the steps:  
determining one or more input parameters;  
evaluating at least one of the input parameters against a threshold for the parameter;

5 if the input parameter exceeds the threshold, forming a new data burst for transmission of the input data.

9. The method of claim 8 wherein the one or more input data parameters include an input data rate and an amount of data available in an input data buffer at the beginning of the data burst.

10. The method of claim 9 wherein the evaluating step is applied for the amount of data available in the input data buffer at the beginning of the data burst, and the threshold is established as an amount of data in the input data buffer to trigger a new data burst for transmission of the input data.

11. The method of claim 9 wherein the evaluating step is applied for the input data rate and the threshold is established as an input data rate sufficiently high to trigger a new data burst for transmission of the input data.

12. The method of claim 10 wherein, upon making a determination in the evaluating step that the amount of data available in the input data buffer does not exceed the defined threshold, the evaluating step is then applied for the input data rate and the threshold is established as an input data rate sufficiently high to trigger a  
5 new data burst for transmission of the input data.

13. A method for managing a data burst comprising the steps of:  
determining one or more input parameters;  
determining residual data remaining in an input buffer in a data burst arranged  
to transmit offered input;  
5 evaluating the determined residual data against a threshold.

14. The method of claim 13 wherein the evaluating step threshold is established in relation to a need for an additional data burst for transmission of the input.

15. The method of claim 13 including the further steps of:  
in the case of the determined measure of residual data exceeding the threshold, determining whether a data rate for a data burst under consideration is less than a maximum supported data rate; and  
5 if the data rate is less the maximum supported data rate, causing a new data burst to be initiated.

16. The method of claim 13 including the further steps of:

in the case of the determined measure of residual data not exceeding the threshold, determining if the data burst under consideration is an ongoing data burst;

if the data burst is an ongoing burst, evaluating whether the remaining  
5 duration of the ongoing burst is less than a defined burst set-up threshold.

if the remaining duration is less than the set-up time threshold, evaluating whether the measure of residual data is greater than a threshold is established as an amount of data in the input data buffer to trigger a new data burst.

in the case of the residual data measure exceeding the threshold, forming a  
10 new data burst for transmission or the input data.

17. The method of claim 16 wherein, for the case of the residual data measure not exceeding the threshold, evaluating a measure of an input data rate against a threshold established in respect to an input data rate sufficiently high to trigger a new data burst, and

5 in the case of the input data rate exceeding the threshold, forming a new data burst for transmission or the input data.

18. The method of claim 15 including the further steps of:

in the case of the data rate not being less the maximum supported data rate, determining if the data burst under consideration is an ongoing data burst;

if the data burst is an ongoing burst, evaluating whether the remaining  
5 duration of the ongoing burst is less than a defined burst set-up threshold.

if the remaining duration is less than the set-up time threshold, evaluating whether the measure of residual data is greater than a threshold is established as an amount of data in the input data buffer to trigger a new data burst.

in the case of the residual data measure exceeding the threshold, forming a  
10 new data burst for transmission or the input data.

19. The method of claim 18 wherein, for the case of the residual data measure not exceeding the threshold, evaluating a measure of an input data rate against a threshold established in respect to an input data rate sufficiently high to trigger a new data burst, and

5 in the case of the input data rate exceeding the threshold, forming a new data burst for transmission or the input data.

20. A computer program product that includes a computer readable medium having instructions stored thereon for carrying out the method of claim 1.